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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,110	07/11/2001	Arnaud Farizon	RCA 89215	7964

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EXAMINER

MACCHIAROLO, PETER J

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/889,110

Applicant(s)

FARIZON ET AL.

Examiner

Peter J Macchiarolo

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Amendment

1. The amendment to the claims and the specification has been entered on August 11, 2001, and has been considered.

Specification

2. The disclosure is objected to because of the following informalities: The Specification appears to be directed to document WO 00/48221, and not to the instant Application. Nevertheless, the Examiner has relied on the Specification to identify the invention's details of the instant Application. Further, the Specification does not have appropriate headings according to MPEP §601 and is therefore improper. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program

listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

4. The claims are objected to because they include reference characters which are not enclosed within parentheses, specifically G1.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

5. Claim 1 is objected to because of the following informalities: The claim does not comply with current U.S. practice and accepted claim structure. See MPEP § 608.01(i). The claim is accordingly not clear. The colon in line 7 of the claim suggests that it is the transition, and the intended subject matter contained in the preamble becomes debatable. The Examiner is

interpreting the preamble to be "An electron gun..." before the transitional word "comprising" in the first line of claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the latter" in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim. The Examiner is interpreting "latter" to indicate the cathode.

Further in claim 1, it is not clear if "the electrode G1" on line 6, corresponds to the "the control electrode" on line 6. The same terminology should be used in a claim for defining the same feature.

Claim 2 recites the limitation "the cathode supports" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 is dependent upon a rejected base claim and is consequently rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3 are rejected under 35 U.S.C. 103(a), as being unpatentable over Van Eck (USPN 5,861,708) in view of Matsuda et al. (USPN 5,574,330).

In regards to claim 1, Van Eck discloses in figure 2, an electron gun comprising at least one cathode (element 22) for emitting an electron beam; a dish-shaped control electrode G_1 (element 21) with a planar part (element 27) and at least one aperture (not labeled) for the passage of the electron beam. Van Eck further discloses in figure 4b, at least two metal components forming a lateral skirt (elements 33a and 33b) which at least partially surrounds the cathode, and the ends of the two components overlap at least partially and are secured to one another at the points of overlap.

Van Eck is silent to a means for supporting the cathode so as to keep the cathode at a specified distance from the control electrode.

However, Matsuda teaches in column 5, lines 50-53, and figure 1d, that a projection (element 1e) is formed at the control electrode's corner portion in such a manner as to project away from the other electrode element. Matsuda further teaches in column 5 lines 54-67, and column 6 lines 1-3, that many variations are acceptable for supporting the cathode at a specified distance from the electrode.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct an electron gun with at least one cathode, with a dish-shaped control electrode, with an apertured, planar part, further with three metal components including a planar component, and a lateral skirt which the ends overlap partially, and further, with a modified means for supporting the cathode so as to keep the cathode at a specified distance from the electrode, since it is well known in the art that a successful electron gun for a color CRT has to have a cathode that is supported away from the skirt to accurately irradiate a phosphor screen.

In regards to claim 2, Van Eck in view of Matsuda teach all of the recited limitations of claim 1 (above).

Matsuda further teaches in figure 1b that the cathode support is secured a lateral skirt.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the electron gun according to claim 1 (above), further wherein the cathode supports are secured directly to the lateral skirt, since it is well known in the art that this bond will reduce the amount of components used and manufacturing steps required, and therefore will reduce the overall cost of the component.

In regards to claim 3, Van Eck in view of Matsuda teach all of the recited limitations of claim 1 (above).

Both Van Eck and Matsuda teach that a cathode-ray tube has an electron gun.

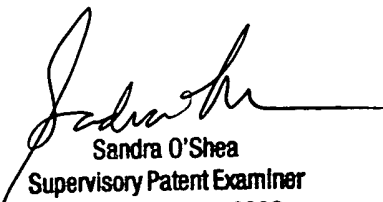
Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct an electron gun according to claim 1 (above), further wherein a cathode-ray tube uses the electron gun, since it is well known in the art that this type of electron gun is well suited for focusing and accelerating electrons which is required for a cathode ray tube.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (703) 305-7198. The examiner can normally be reached on 7.30 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Sandra O'Shea
Supervisory Patent Examiner
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